DOC HASTINGS, WA
CHAIRMAN
DON YOUNG, AK
JOHN J. DUNCAN, JR. TN
LOUIE GOHMERT, TX
ROB BISHOP, UT
DOUG LAMBORN, CO
ROBERT J. WITTMAN VA
PAUL C. BROUN, GA
JOHN FLEMING, LA
MIKE COFFMAN, CO
TOM MECLINTOCK, CA
GLENN THOMPSON, PA
JEFF DENHAM, CA
DAN BENSHEK, MI
DAVID RIVERA, FL
JEFF DUNCAN, SC
SCOTT R TIPTON, CO
PAUL A. GOSAR, AZ
RAUL R. LABRADOR ID
KRISTI L. NOEM, SO
STEVE SOUTHERLAND II. FL
BILL FLORES, TX
ANDY HARRIS, MD
JEFFREY M. LANDRY, LA
CHARLES J. "CHUCK" FLEISCHMANN TN
BILL JOHNSON, OH

## U.S. House of Representatives Committee on Natural Resources Washington, VC 20515

February 26, 2011

EDWARD J MARKEY, MA
RAWKING DEMOCRATIC MEMBER
DALE E. KILDEE, MI
PETER A. DEFAZIO, OR
ENIF H FALEOMAVAEGA, AS
FRANK PALLONE, JR., NJ
GRACE F. NAPOLITANO, CA
RUSH D HOLT. NJ
RAULH M GRUJALVA, AZ
MADELEINE Z BORDALLO, GU
JIM COSTA, CA
DAN BOREN, DK
GREGORIO KILLI CAMACHO SABLAN CNMI
MARTIN HEINRICH, NM
BEN RAY LUJÁN, NM
DONNA M. CHRISTENSEN. VI
JOHN P. SARBANES, MD
BETTY SUTTON, OH
NIKI TSONGAS, MA
PEDRO R. PERLUISI, PR
JOHN GARAMENDI, CA
COLLEEN W. HARNABUSA, HI

JEFFREY DUNCAN
DEMOCRATIC STAFF DIRECTOR

TODO YOUNG CHIEF OF STAFF

> The Honorable Lisa Jackson Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

## Dear Administrator Jackson:

I write to request your immediate assistance and immediate action in responding to a report in today's The New York Times indicating that there is a serious risk to the health of millions of people who live near sites at which extraction of natural gas is occurring via a process known as hydraulic fracturing. The New York Times investigation and associated documentation suggest that millions of gallons of water that is contaminated with drilling waste, including radioactive radium at levels that far exceed safe drinking water standards, has been dumped into rivers that supply drinking water to surrounding communities. This is of particular health concern since inhaled or ingested radium increases the risk of developing lymphoma, bone cancer, and diseases that affect the formation of blood, such as leukemia and aplastic anemia.

This disposal of drilling wastewater into surface waterways is reportedly occurring in an almost complete absence of monitoring of either the wastewater itself or the drinking water intakes located downstream of those very same waterways. These discharges have also occurred with at least some knowledge of the risks on the part of federal and state regulators and despite the clear dangers to public health and safety.

The investigation published today by The New York Times reveals that:

- The millions of gallons of produced wastewater that are a byproduct of the hydraulic fracturing process have been transported to sewage treatment facilities, where they are treated and then dumped into nearby rivers.
- The wastewater from wells drilled in Pennsylvania and West Virginia that are sent to sewage plants in Pennsylvania, New York, West Virginia and other states contains levels of radioactivity or radium that can be hundreds or even thousands of times as high as the standards allowed for drinking water.

- A previously confidential study commissioned by the Environmental Protection Agency (EPA) concluded that these sewage plants were technologically incapable of removing radium, salts and other contaminants from drilling waste, and that by dumping the contaminated water after it underwent inadequate treatment, these facilities were probably breaking state and federal law. Nevertheless, this radioactive water was still allowed to be dumped into rivers in several states that together provide drinking water to millions of people.
- Even when the wastewater is dumped into a larger body of water such as a river, EPA and the oil and gas industry knew that dilution alone could not remove the radiation or the risk that it posed. Additionally, because of these risks, in December 2009, EPA scientists sent a letter to New York State regulators advising that sewage treatment plants should not accept drilling waste with levels of radium that were more than twelve times the drinking water standard, and should not discharge wastewater that contained higher levels of radium than the drinking water standard.
- Last year, EPA scientists checked to see whether some Pennsylvania rivers were capable of diluting the radium to the point where it would no longer be a threat. They concluded that this could not be done.
- Additionally, in Pennsylvania, most drinking water intake facilities, which are
  often located downstream from the wastewater discharge locations, have not been
  tested for radiation since 2006 or before, even though the natural gas drilling
  boom began in 2008. In fact, state and federal regulators have granted permission
  for drinking water facilities in Pennsylvania to test for radiation only once every
  six or nine years.

I do not believe that the price for energy extracted from deep beneath the earth's surface should include a risk to the health of those who live above it. I am outraged that state and federal regulators were evidently well aware of the risks that the wastewater might pose, but instead chose to adopt a "see no evil, hear no evil" approach to regulation by ignoring them. I request your assistance in responding to the following questions and requests no later than close of business on Friday, March 18, 2011:

1) Please list all steps (and timeframes associated with each step) that EPA plans to take to revise its regulations to require immediate, (and thereafter, frequent) tests of a) wastewater discharged from facilities that accept drilling waste into sources of drinking water, b) drinking water intake facilities located downstream from wastewater facilities that accept drilling waste, and c) drinking water that is provided by facilities that utilize sources of drinking water that are located downstream from wastewater facilities that accept drilling waste. If no such steps are planned, please justify this decision in light of <a href="The New York Times">The New York Times</a> report.

- 2) Please provide copies of all documents (including reports, emails, correspondence, memos, phone or meeting minutes or other materials) related to the adequacy of technology that is in place at wastewater treatment and drinking water facilities to remove radium and any other toxic substance typically found in wastewater produced from hydraulic fracturing.
- 3) Please provide copies of all documents (including reports, emails, correspondence, memos, phone or meeting minutes or other materials) related to reports of actual discharges of radium and any other toxic substances typically found in wastewater produced from hydraulic fracturing from wastewater treatment facilities.
- 4) Please provide copies of all documents (including reports, emails, correspondence, memos, phone or meeting minutes or other materials) related to reports of contamination of drinking water sources or drinking water itself with radium and any other toxic substance typically found in wastewater produced from hydraulic fracturing.
- 5) The New York Times report indicates that in 2008, a wastewater treatment facility began discharging large amounts of fecal matter into the Susquehanna River, after drilling waste evidently killed the microbes that were supposed to break down the household sewage. Please provide copies of all documents (including reports, emails, correspondence, memos, phone or meeting minutes or other materials) related to reports that wastewater produced from hydraulic fracturing has itself compromised the ability of wastewater treatment facilities to process ordinary sewage adequately by killing the microbes that are supposed to treat it.
- 6) The New York Times report indicates that utility and steel plants located downstream from wastewater discharge sites have experienced corrosion of their machines due to the high levels of salt in the river water that was reportedly from wastewater produced from hydraulic fracturing. Please provide copies of all documents (including reports, emails, correspondence, memos, phone or meeting minutes or other materials) related to reports that wastewater produced from hydraulic fracturing has led to damage at other industrial facilities downstream from the site at which these materials were discharged.
- 7) The New York Times report indicates that in 2009, Wyoming failed to meet air quality standards for the first time due in part to emissions from drilling activities, with one sparsely populated county experiencing ozone levels higher than those found in Houston or Los Angeles. Please provide copies of all documents (including reports, emails, correspondence, memos, phone or meeting minutes or other materials) related to reports that demonstrate or analyze the air pollution impacts associated with natural gas drilling activities.

Ms. Lisa Jackson Page 4 of 4

Thank you very much for your attention to this important matter. If you have any questions or concerns, please have your staff contact Dr. Michal Freedhoff of the House Natural Resources Committee staff at 202-225-2836.

Sincerely,

Church of Muly Edward J. Markey

Ranking Member

The Honorable Doc Hastings cc:

Chairman